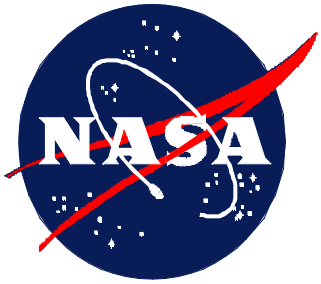
470-PLAN-0007

Earth Explorers Program Continuous Risk Management Plan

February 2001



National Aeronautics and Space Administration

Goddard Space Flight Center

EARTH EXPLORERS PROGRAM

CONTINUOUS RISK MANAGEMENT

PLAN

February 2001

GODDARD SPACE FLIGHT CENTER

GREENBELT, MARYLAND

EARTH EXPLORERS PROGRAM

CONTINUOUS RISK MANAGEMENT PLAN

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1.0 Introduction

The NASA Earth Explorers Program, Continuous Risk Management (CRM) Plan defines the process and implementation for conducting CRM throughout the operational phase of the Earth Science Enterprise missions assigned to the Earth Explorers Program. Implementation of this plan establishes a continuous risk process (identify, analyze, plan, track, and control) that is consistent for all programs under Earth Explorers Program management and ensures that communications and documentation are maintained across the project. Guidelines for this process are provided in "NPG 7120.5, NASA Program and Project Management Processes and Requirements Document".

This CRM Plan is intended to compliment overall Earth Explorers Program Management and make CRM an integral part of project management. Implementation of this plan solicits inputs from everyone in the project, individuals, group leaders, and managers with the Project Manager giving final approval for implementation of this plan. This plan will be reviewed at least annually and updated as required.

1.1 Purpose

The purpose of this document is to describe the Continuous Risk Management Plan tailored for the Earth Explorers Program. The objective is to implement formal CRM for the operational life of the Earth Explorers Program missions. The plan includes brief descriptions of the CRM processes to be used in carrying out this effort. CRM will assist the project in performing informed decision-making, optimizing resource allocation and use, and coordinating trade studies against cost, schedule, and performance goals.

1.2 Scope

This document describes a formal process for utilizing CRM throughout all of the operational missions assigned to the Earth Explorers Program. CRM applies to NASA GSFC activities, as performed by both civil servants and contractors supporting Earth Explorers Program operations, including spacecraft, instrument, ground system, and all disciplines supporting the project. In addition, the objective of CRM is to forecast and manage risks before they become problems. To the extent possible, Earth Explorers Program will utilize lessons learned from other operational missions in carrying out this CRM Plan.

1.3 Document Organization

This document is organized into five major sections.

Section 1 is an introduction and overview of this document.

Section 2 lists parent, applicable and reference documentation.

Section 3 provides an overview of Earth Explorers Program continuous risk management process.

Section 4 describes the risk identification, analysis, and planning process being used.

Section 4 describes the tracking, control, and communication necessary for CRM.

Section 5 describes the tools used to implement CRM on the Earth Explorers Program.

Appendix A contains a list of acronyms used in this document.

Appendix B includes documentation figure for the Risk Information Sheet including process and instructions for filling it out.

2.0 Related Documentation

This section lists additional, related documents. Section 2.1 lists the parent document that establishes the criteria and technical basis for this document. Section 2.2 lists the applicable document; this document is in conformance with the requirements and contents of this document. Section 2.3 lists recommended reference documents for informational purposes.

2.1 Parent Document

470-PLAN-0001, Earth Explorers Program Plan, dated TBD

2.2 Applicable Documents

NPG 7120.5A, NASA Program and Project Management Processes and Requirements Document, Revision A, Dated April 3, 1998.

The latest version of GSFC governing documents listed below, as found on the http://gdms.gsfc.nasa.gov/gdms/plsql/menu_guest shall be applicable to all Earth Explorers Missions.

GPG 1060.1 -MANAGEMENT RESPONSIBILITY

GPG 1410.1 -DIRECTIVES MANAGEMENT

GPG 1440.7 -CONTROL OF QUALITY RECORDS

GPG 1710.1 -CORRECTIVE AND PREVENTIVE ACTION

GPG 7120.1 -MISHAP, HAZARD, AND EMERGENCY NOTIFICATION

2.3 Reference Documents

470-PLAN-0001 Earth Explorers Program Plan, Dated TBD

Carnegie Mellon University, Continuous Risk Management Guidebook, Copyright 1996

GSFC Software Assurance Technology Center (SATC), Course Materials and Workshop Materials, Dated January 1999

3.0 Continuous Risk Management Overview

This section provides an overview of the CRM process and its relation to the Earth Explorers Program Management, including primary activities, process steps, terms, and definitions. Details of the CRM process along with actions, tasks, and tools specific to the Earth Explorers Program, are provided in subsequent sections of this plan.

There are six primary activities of the CRM process:

Risk Identification: continuous efforts to capture, acknowledge, and document risks as they are found.

Risk Analysis: an evaluation of all identified risks to estimate the probability of occurrence, severity of impact, timeframe of expected occurrence or when mitigation actions are needed, classification into sets of related risks, and priority ranking.

Risk Planning: establishes actions, plans, and approaches for addressing risks and assigns responsibilities and schedules for completion. Metrics for determining the risk status is also defined during this step.

Risk Tracking: an activity to capture, compile, and report risk attributes and metrics which determine whether or not risks are being mitigated effectively and risk mitigation plans are being performed correctly.

Risk Controlling: an activity that utilizes the status and tracking information to make a decision about a risk or risk mitigation effort. A risk may be closed or watched, a mitigation action may be re-planned, or a contingency plan may be invoked. Decisions on the appropriate resources needed are also determined during this activity.

Risk Communicating and Documenting: an overt action to communicate and document the risk at all steps of the CRM process. This can be in the form of an action item log, risk information sheet, risk database, mitigation plan, status report, tracking log, and/or meeting decision.

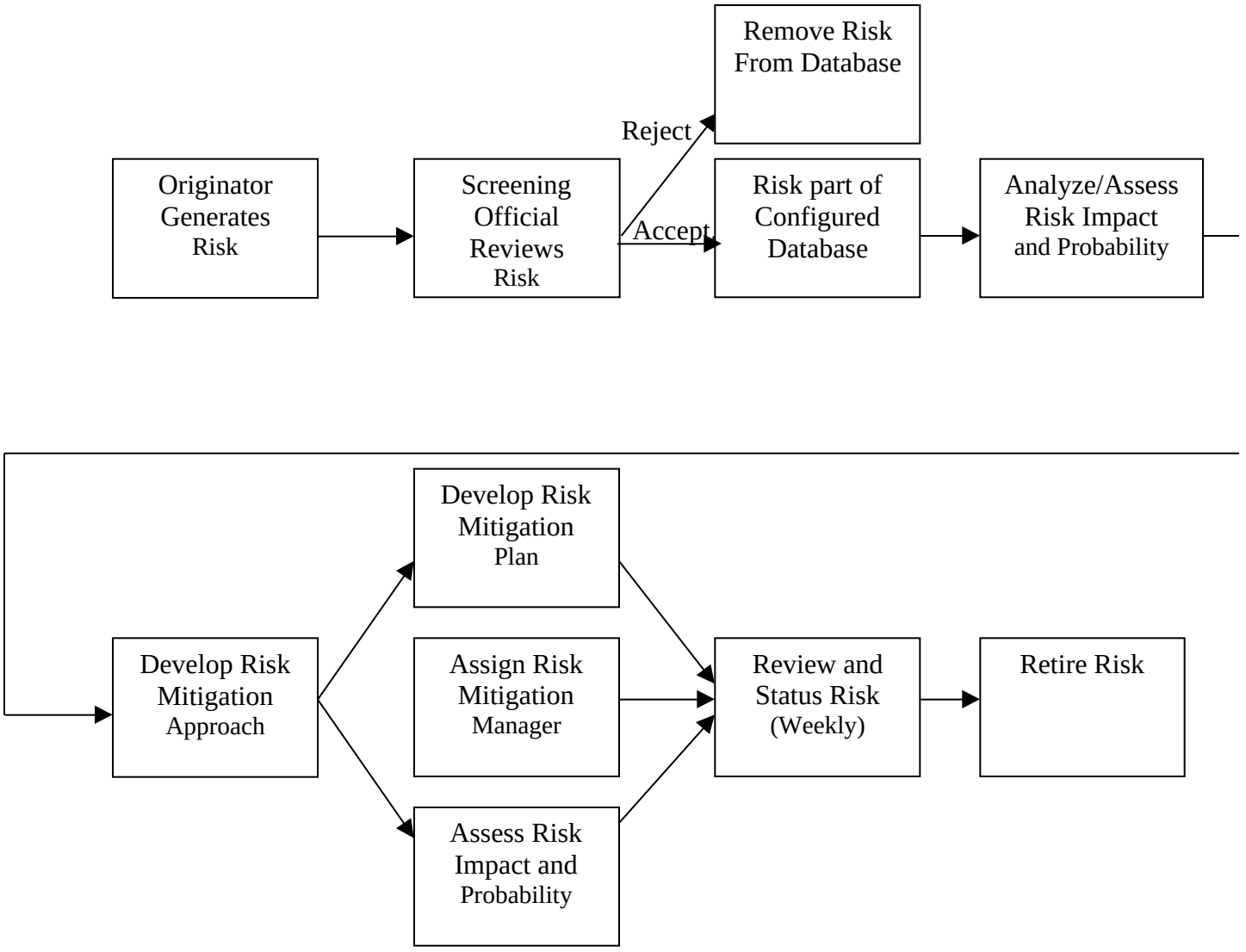
CRM is carried out during day to day activities of Earth Explorers Program Mission personnel, as well as during key meetings. For the Earth Explorers Program, only those risks with a red exposure grade (see section 4) shall have any resources expended for mitigation. However, all other risks shall be watched or accepted. Watched risks shall have their attributes examined and

reported on a monthly basis. Any risks that are identified but ignored are considered accepted. It is also understood that not all risks to a project are identified; it is the intent of CRM to provide the means to handle identified risks.

3.1 Risk Management Process and Data Flow

Figure 3-1 illustrates the CRM process flow for the Earth Explorers Program. The diagram depicts the functional relationships of the identification, planning, analyzing, tracking, and controlling activities and overlays the reporting and communication activities. This section provides a description of the detailed process steps.

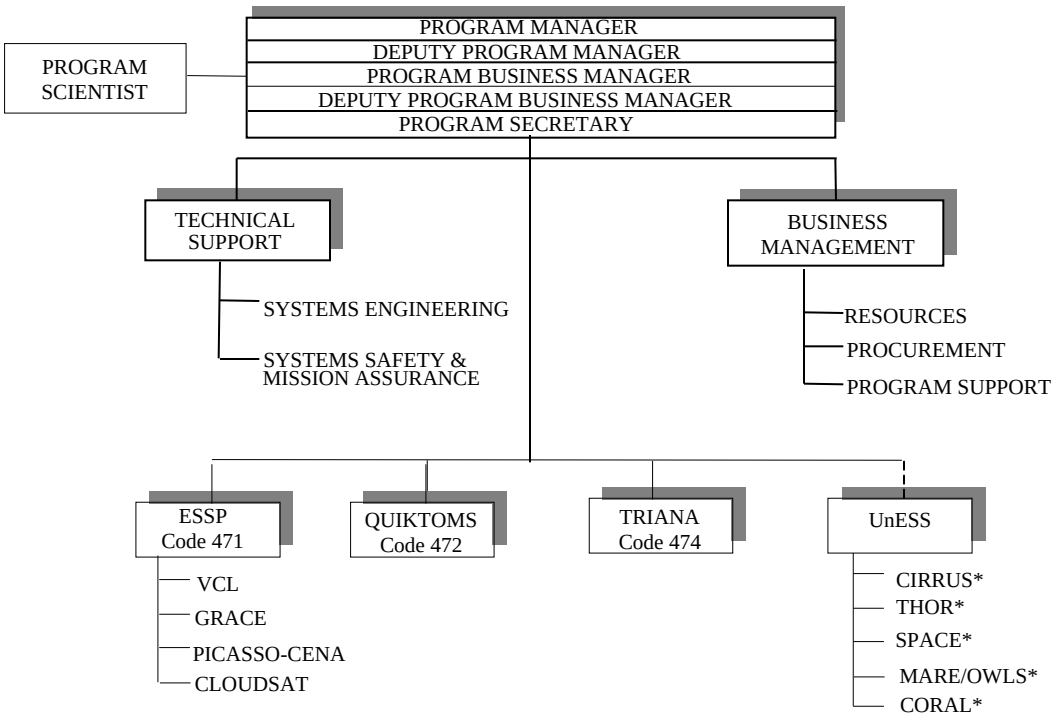
Figure 3-1. CRM Process Flow for the Earth Explorers Program



3.2 Earth Explorers Program Organization

Figure 3-2. Depicts the organization as defined in the Earth Explorers Program Management Plan. It is repeated here for convenience. The diagram illustrates the structure of the program team along with the organizational role of each team member.

Figure 3-2. EARTH EXPLORERS PROGRAM ORGANIZATION



*UnESS-Current Concept Studies

3.3 EARTH EXPLORERS PROGRAM Functional Assignments

Figure 3-3 depicts the responsibilities of all project personnel as individuals, Mission Managers, and Earth Explorers Program Manager for managing risk within the Earth Explorers Program. The diagram identifies the personnel responsible for performing each specific CRM task. A dotted line splitting any boxes shown in Figure 3-3 represents a shared responsibility for activities within the boxes. Tables 3-1 and 3-2 further defines these responsibilities and paths of communication.

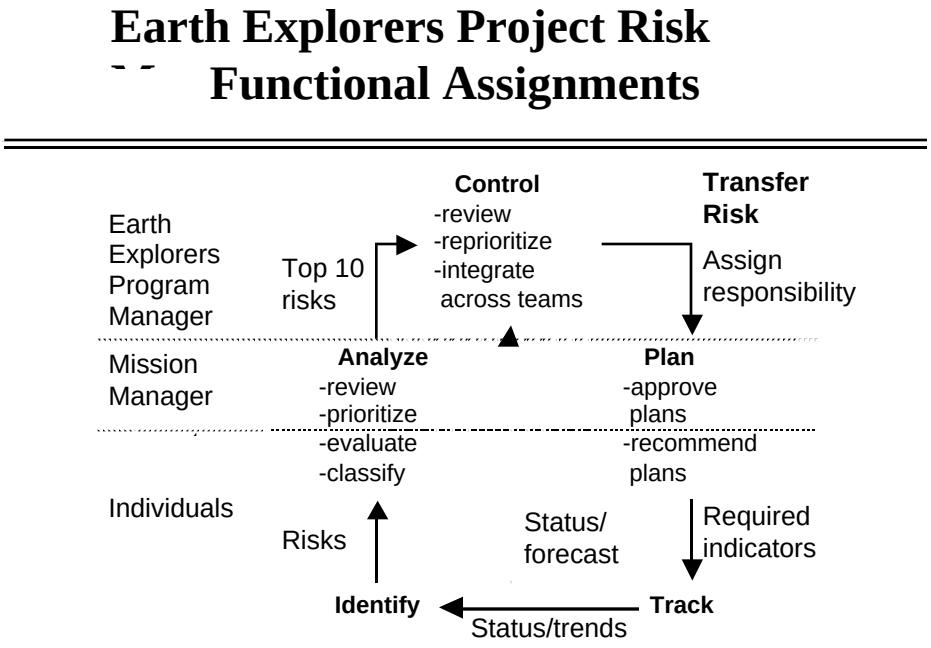


Figure 3-3. EARTH EXPLORERS PROGRAM RESPONSIBILITIES

Table 3-1. EARTH EXPLORERS PROGRAM RESPONSIBILITIES

Who	Responsibilities
Individuals	Mission Managers, PI's, Engineers, Scientists, Project Manager, Contractors, and Customers · identify new risks · estimate probability, impact, and time frame · classify risks · recommend approach and actions · track risks and mitigation plans (acquire, compile, and report) · Assist in risk prioritizing
Mission Managers	· integrate risk information from all individuals · ensure accuracy of probability /impact/timeframe estimates and the classification · review recommendations on mitigation approach and action · reprioritize all risks to determine risk grading · assign or change responsibility for risks and mitigation plans · report their risk grading recommendations to the Project Manager · implement control decisions for risks · build action plans (determine approach, define scope, & actions)

	· collect and report general risk measures/metrics · coordinate communications with Earth Explorers Program Manager
Earth Explorers Program Manager	· authorize expenditures of resources for mitigation · integrate risk information from all Mission Manager · reprioritize all risks to determine the red graded project risks · make control decisions (analyze, decide, execute) for red graded project risks · assign or change responsibility for risks and mitigation plans within the project · coordinate communication with Sr. Managers and external customers · review general risk measures/metrics with SAM during each quarter to evaluate effectiveness of risk management

Note: Table 3-2 provides the criteria for communicating and documenting risk information.

Table 3-2. Earth Explorers Program Risk Information

Communication Path	Risk to be Communicated/Documented
From Individuals to Mission Managers	· Any risk that impacts performance of experiment · Any risk that impacts >10% of budget · Any risk that exceeds schedule milestones · Any risk that needs to be transferred to another team
From Mission Managers to Project Manager	· Red graded risks of the IPT · Red graded Risk Trends and Status · Mitigation activity status
Earth Explorers Program Manager to Senior Management	· Red graded risks in the project · Any risk that impacts mission success · Any risk that impacts the technical and scientific aspects of the Earth Explorers Program · Any risk that causes major slips of schedule milestones · Any risk that cause the project budget to be exceeded by more than 10% · Any risk that negatively impacts NASA's reputation · Risk Status

4.0 Risk Identification, Analysis, and Planning

Performing risk identification, analysis, and planning for the Earth Explorers Program are the first three phases of CRM. These steps are necessary in recording and prioritizing project risks. The following sections describe these phases for the project.

4.1 Risk Identification

The process of risk identification is a daily ongoing project activity that takes place during the routine project workflow. Project activities such as programmatic and technical meetings, telecons, reviews, and other communication interchanges, will surface project risks. When this occurs, the risk (if not previously recorded) should be captured by placing it on a Risk Information Sheet to be analyzed and tracked.

The initial risk statement will contain the risk condition, one or more consequences, and a concise context description. Performing this task provides the project the ability to transform uncertainties and issues into tangible and manageable risks. This also allows the project to locate and manage risks before they become problems.

As described above, risk identification is part of the ongoing project activities and not a separate discipline or group of activities. Risk identification is the responsibility of every individual involved in the Project. The overall objective of identifying and managing project risks is to reduce or eliminate risks before they become problems, thus resulting in increased chances of the project's success.

Risks can be present in any area of the Project. Risks may be technical or programmatic. If risks are technical, they may be attributed to:

- inconsistent or incomplete requirements
- design oversights
- unproven technologies
- interface or integration difficulties
- unanticipated fault detection
- unforeseen quality and/or safety issues
- insufficient resources (e.g., mass power, data rate, computer capability)

These and other technical risks may be with the spacecraft, the instruments, the ground system or any other part of the mission. The technical risks generally involve technical disciplines such as systems engineering, hardware and/or software engineering, integration & test.

Programmatic risks include all risks that are not technical by nature. However, technical risks may include some attribute of a programmatic risk like impact to cost and/or schedule. Programmatic risks generally involve management resources, communications, and decisions.

4.2 Risk Analysis

Once an Earth Explorers Program technical or programmatic risk has been identified and written as a risk statement (Condition; Consequence(s) + Context) on the Risk Information Sheet, it is then analyzed. The analysis of the risk statement considers three identifiers for prioritizing and establishing the importance of identified risks.

The prioritization process is performed as a roll-up function starting at the risk element identified by the individual person and weighted through the risk process up to the system level. An identified risk may receive a higher prioritization at the element level than it would when rolled-up to the system level. These three identifiers for risk weighting at the system level are:

- Impact — the severity if risk should materialize
- Probability — the likelihood of risk occurrence
- Timeframe — time to start action or mitigation

The above three identifiers are prioritized into three levels or degrees as follows:

IMPACT (the severity if risk should materialize)

Very High (VH) = Critical Impact

Potential Project cost overrun >10%

Potential Project schedule slip

Loss of life, personal injury, loss of spacecraft, one or more Instruments, or critical Level 1 Science

High (H) = Critical Impact

Potential Project cost overrun >10%

Potential Project schedule slip

Major loss of Spacecraft or Instrument capability; potential impact to Level 1 Science

Medium (M) = Critical Impact

Potential Project cost overrun >10%

Potential Project schedule slip

Need requirement redefinition; need design or implementation work-around; no loss of Level 1 Science

Low (L) = Major Impact

Potential Project cost overrun 3 to 10%

Schedule slip affecting critical path

Very Low (VL) = Minor Impact

Potential project cost overrun <3%

Non-critical path schedule slip

PROBABILITY (the likelihood of risk occurrence)

- Very High (VH) = Most Likely >95%
- High (H) = Very Likely 75% to 95%
- Medium (M) = Probably 50% to 75%
- Low (L) = Not Likely 25% to 50%
- Very Low (VL) = Very Un-Likely <25%

TIME (time to start action or mitigation)

- Near Term (N) = <3 months
- Mid Term (M) = 3 months to 9 months
- Far Term (F) = >10 months

The author/originator of the risk provides the risk “title” and “statement”, dates it in the “identified” field, and places their name in the "submitter name" field on the form. In addition they fill in the “context” and “class” fields and send the form on to the Project Risk Manager (PRM). The PRM receives the Risk Information Sheet, reviews it for completeness and brings it to the next scheduled Earth Explorers Program review meeting as an agenda item to be reviewed for acceptance. At the staff review meeting the risk impact, probability, and time frame will be determined for the individual risks and these values shall be placed on the Risk Information Sheet.

If accepted, the Risk Information Sheet is tracked by the PRM. The identified risk is also placed on the Risk Tracking Log for tracking purposes. Appendix B includes the Risk Information Sheet template and process/instructions for filling it out.

4.3 Risk Planning

In this phase of the Earth Explorers Program CRM process, the Project decides what action, if any, will be taken to manage/mitigate the risk or set of related risks. There are four actions that can be assigned to a risk. The options are:

- **RESEARCH** the risk to gain more information about it.
- **ACCEPT** the risk as stated and do nothing about it other than accept it.
- **WATCH** for identified “triggers” before taking any action about the risk.
- **MITIGATE** the risk to reduce or eliminate it.

5.0 Risk Tracking, Control, and Communication

Performing risk tracking, control, and communication for the Project is necessary to ensure risks are tracked and are not lost in the process. The following paragraphs describe these three phases of the CRM process.

5.1 Risk Tracking

In the risk tracking phase the Project acquires, compiles, and reports information on selected risks. This phase is necessary to collect accurate, timely, and relevant Project risk information and to present it in a clear manner. This information shall be provided at monthly Project Status Review (PSR) meetings and be included on the agenda as required. This information shall also be provided in project review reports along with other project status information.

Individuals and groups shall identify/document risks and shall track/report each risk to project management. The Project Manager controls risks within the project, and shall provide status to upper management. Any risk that is of high priority and needs support beyond the project's capability will be brought to upper management's attention for their support and/or resolution.

Important Earth Explorers Program technical and programmatic risks that are addressed by mitigation planning shall be monitored and tracked by the PRM for reduction and/or closure of the risk. This process shall attempt to provide some method of measurement to show progress toward achieving the prescribed goal

Each identified project risk that is to be mitigated with a risk plan shall address how progress towards reduction or closure can be measured. It is good to note that only meaningful current data should be collected and measured for any given project risk.

5.2 Risk Control

During the controlling phase, informed, timely, and effective decisions are made regarding risks and their mitigation plans. Risk control is performed using standard Earth Explorers Program Management monitoring techniques. Controlling risks will be integrated and coordinated in the project's routine management activities.

The following are mitigation plan decisions:

- Replan
- Close the risk
- Invoke a contingency plan
- Continue tracking and executing the current plan

The decisions to proceed on mitigation planning are essential and require current accurate data to effectively make the right decisions in the control phase. The Project Manager or designee will make final decisions on risk mitigation planning.

5.3 Risk Communication

Communicating risks on the project provides personnel an understanding of the project's overall status with regard to risks and mitigation alternatives. Successful risk communication raises the level of understanding of relevant issues or actions. CRM communications have the following characteristics:

- Free flow of information between individuals, groups, and the Earth Explorers Program Organization
- Inclusion of formal, informal, and impromptu communications
- Value of individual contributions
- Application of consensus voting of teams

The Risk Information Sheet and Risk Tracking Log shall be used, maintained, and controlled throughout the Earth Explorers Program CRM process. This information will be available and reviewed by the project personnel on a periodic basis.

The Project shall have a Web Site to provide access to risk status information. Appendix B depicts an example of the CRM use in the Earth Explorers Program WEB Site.

6.0 Risk Tools and Implementation

This Section identifies the tools that will be used for CRM by the EARTH EXPLORERS PROGRAM. The tools are utilized throughout the project for technical and programmatic risks. The tools are used by individuals, teams, and management to identify, analyze, plan, track, and control project risks. These tools are described in the CRM Guidebook. A copy is issued to each student when they take the CRM course. The following tools are specifically used by the project:

- **CRM Training** - The Earth Explorers Program management and all Mission Managers have participated in a formal training session on CRM provided through the GSFC Office of Human Resources. Class material provided the CRM methods and tools needed and identified in this plan. CRM training is required by of all Project personnel. New employees will attend a class.

- **Risk Management Plan** - This documents how CRM will be implemented for the EARTH EXPLORERS PROGRAM. This plan will be maintained by the PRM, reviewed at least annually, and updated as required. It is the PRM's responsibility with the Project Manager's support to ensure that this plan is implemented.

- **Risk Information Sheet** - (see Appendix B, Figure B-1) The initial means of identifying and documenting a risk. The form is maintained throughout the life of an identified risk, and information is added to the form when known and available. Appendix B includes the form template and process/instructions for filling the form out. Completed forms will be maintained by the PRM in a database system under Configuration Management (CM).

- **Risk Tracking Log** - This list provides a risk number, title, and quick look-up for all identified and accepted project risks. The list identifies a responsible person and due date for the risk that serves as a tickler file until risks are closed. The PRM, with clerical support, is responsible for updating, maintaining, and disseminating this list.

- **Earth Explorers Program Risk Management Process Diagram -** (see Figure 3-1) The diagram depicts the project's risk management flow process. It is meant to portray that CRM is an overlay of ongoing activities and not a separate activity. It also portrays that the CRM Plan plays a major role in describing the Earth Explorers Program CRM process.

- **Project Metrics** There are various types of metrics supporting both technical and programmatic activities. Earth Explorers Program uses metrics in estimating and showing progress within the project. This effort will continue and will be used in risk management for risk monitoring, tracking, forecasting, and reporting.

- **EARTH EXPLORERS PROGRAM WEB Site** – Earth Explorers Program WEB Site (http://128.183.212.203:591/[*] * = mission, ie. GRACE; CloudSat; VCL; etc.) will incorporate the Risk Information Sheet for individual use and forwarding. The WEB Site will also include the Risk Action Item Log for providing status of the projects risks. A WEB Site CRM example is included in Appendix B.

- **Mitigation Plans -** These plans will be developed for a risk or set of risks (similar within the same family/closely related) that require significant resources to reduce or close the risk(s). Information required for a mitigation plan (technical and/or programmatic) includes:

  - Title and serial number of the project risk(s) as is on the Risk Information Sheet

  - Description of how the risk(s) will be mitigated and measurement used to indicate progress. Provide method and frequency of reporting progress and status

  - Schedule and resources (hours, dollars, etc.) needed to implement the mitigation plan. Show the individual responsible for the activity and Project Manager approval to implement the mitigation plan.

- **Project Formal/Informal Meetings** - All project formal and informal meetings should have CRM as a topic on the agenda when it is appropriate. These meetings are the means of providing the most effective communications to the project on CRM. Several tools are available to be used within meetings. They range from simple Brainstorming, Multivoting and Voluntary Risk Reporting to more formal Stoplight Charts, Bar Graphs, etc.

Appendix A. Earth Explorers Program Acronym List

AA	Associate Administrator
AO	Announcement of Opportunity
CCB	Configuration Control Board
CDR	Critical Design Review
CFO	Chief Financial Officer
CIC	Capital Investment Council
CM	Configuration Management
COTR	Contracting Officer's Technical Representative
CPM	Critical Path Method
CRM	Continuous Risk Management
CRMS	Continuous Risk Management System
CSU	Colorado State University
CTC	Cost to Complete
DPAF	Dual Payload Attachment Fitting
EE	Earth Explorers Program
EEPO	Earth Explorers Program Office
EOS-G	Earth Observing System-GSFC
ESE	Earth Science Enterprise
ESMO	Earth Science Mission Operations
ESSP	Earth System Science Pathfinder
ETC	Estimate to Complete
FMEA	Failure Modes and Effects Analysis
FTA	Fault Tree Analysis
FY	Fiscal Year
GPMC	Goddard Program Management Council
GSE	Ground Support Equipment
GSFC	Goddard Space Flight Center
H/W	Hardware
HQ	Headquarters
I&T	Integration and Test
IFM	Integrated Financial Management
ISO	International Standards Organization
IV&V	Independent Verification and Validation
JPL	Jet Propulsion Laboratory
JSC	Johnson Space Center
KSC	Kennedy Space Center
L/V	Launch Vehicle
LaRC	Langley Research Center

Appendix A. Earth Explorers Program Acronym List

LRR	Launch Readiness Review
MBM	Mission Business Manager
MCR	Mission Confirmation Review
MCRR	Mission Confirmation Readiness Review
MDR	Mission Design Review
MDRA	Mission Definition and Requirements Agreement
MM	Mission Manager
MOCD	Mission Operations Concept Document
MOU	Memorandum of Understanding
MRR	Mission Readiness Review
MSR	Monthly Status Review
NEPA	National Environmental Program Assessment
NET	No Earlier Than
NHB	NASA Handbook
NMC	NASA Mission Cost
NOA	New Obligational Authority
NPG	NASA Procedures and Guidelines
OMB	Office of Management and Budget
ORR	Operational Readiness Review
PCA	Program Commitment Agreement
PDR	Preliminary Design Review
PER	Pre-Environmental Review
PI	Principal Investigator
PM	Program Manager
PMC	Program Management Council
POP	Program Operating Plan
PRM	Project Risk Manager
PRA	Probabilistic Risk Assessment
PSM	Project Support Manager
PSR	Pre-Ship Review
PSR	Project Status Review
PSS	Project Support Specialist
RA	Resource Analyst
RAO	Resource Analysis Office
RFP	Release for Proposal
SATC	Software Assurance Technology Center
S/C	Spacecraft
SDB	Small and Disadvantage Business
SEU	Single Event Update

Appendix A. Earth Explorers Program Acronym List

SMRD	Science and Mission Requirements Document
SOW	Statement of Work
SRR	System Requirements Review
STS	Space Transportation System
TMC	Total Mission Cost
TRL	Technology Readiness Levels
UnESS	University-class Earth System Science
WBS	Work Breakdown Structure
WCCA	Worst Case Circuit Analyses
WFF	Wallops Flight Facility

Appendix B. Document Figures and Process/Completing Risk Information Sheet

Processing/Completing the Risk Information Sheet

STEP 1 This form is initiated by the risk author/originator by completing the:

- "*Identified*" date when the risk was identified

- "*Title*" short title identifying the risk

- "*Statement*" statement of the risk consisting of condition and consequence(s)

- "*Submitter Name*" person or organization that identified the risk

- "*Context*" Associated information supporting the risk

- "*Class*" Tech for technical,Prog for programmatic, Grd for ground, SC for spacecraft, or Inst for instrument. Inst may be expanded to include Inst-ETM+ or Inst-MLS. etc.

If the author/originator is aware of any additional risk information at the time of submittal to the Project Risk Manager (PRM), it certainly would be helpful to have in evaluating and processing the risk statement. Once the risk form has at least the six required fields filled in, it is then accepted by the PRM for processing.

STEP 2 The CRM Project Review consists of the immediate Earth Explorers Program Staff and is chaired by the Program Manager or designee. The staff will review the risk submittal for completeness and acceptance. The risk submittal is then placed on the Risk Tracking Log for tracking. If the risk submittal is rejected the originator is notified along with the rationale and the assigned number closed/rejected.

Minutes of the project review are taken and all risk actions are facilitated and/or tracked by the PRM. The PRM ensures that the WEB Site reflects all updates of Project Risk Information. The project staff will review the status of the Risk Tracking Log and the Project Manager has responsibility for approving mitigation plans, and closing completed risks. Special topics

dealing with CRM may require other individuals to support staff meetings as needed. The remaining fields on the risk form are incorporated at acceptance and during tracking and closure:

- "*Priority"* priority ranking of the risk

- "*Probability"* the likelihood of risk occurrence

- "*Impact"* the severity if risk should materialize

- "*Timeframe"* time to start action or mitigation

- "*Assigned to"* who is responsible for this risk

- "*Mitigation strategy"* , "*Contingency plan and trigger"* strategy if mitigation is used

- "*Status/status date"* update of actions and changes

- "*Approval"*, "*Closing date"*, and "*Closing rationale"* approval of closure and rationale

STEP 3 Once accepted the Earth Explorers Program Risk Information Sheets are maintained and tracked to closure and kept on file. The Risk Tracking Log provides status and a quick look-up for overall progress. The PRM will maintain records for all CRM activity, and, with support from the WEB Site curator, will keep the Risk Management portion of the WEB Site up to date.